

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	N NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
09/966,551 09/26/2001		/2001	Bobby W. Sanders	26272/04003	5266	
24024	7590	12/10/2003	EXAMINER			
CALFEE H	ALTER & G	DINH, TIEN QUANG				
800 SUPERI	OR AVENUE			<u> </u>		
SUITE 1400				ART UNIT	PAPER NUMBER	
CLEVELAN	D, OH 4411	4		3644		

DATE MAILED: 12/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

			Applicatio	n No.	licant(s)		1					
Office Action Summary			09/966,55	1	SANDERS ET AL							
			Examiner		Art Unit							
			Tien Dinh		3644							
Period f	The MAILING DATE of this commu r Reply	nication app	ars on the	cover sheet with the co	orrespondence ac	Idress						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status												
1)🖾	Responsive to communication(s) fil	ed on <u>22 O</u>	ctober 2003	.								
2a) <u></u> □	This action is FINAL.	2b)⊠ This a	action is no	n-final.								
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.											
Dispositi	on of Claims											
4)🛛	Claim(s) <u>18-42</u> is/are pending in the application.											
	4a) Of the above claim(s) is/are withdrawn from consideration.											
5)	Claim(s) is/are allowed.											
6)⊠	Claim(s) <u>18-42</u> is/are rejected.											
7)	Claim(s) is/are objected to.											
8) 🗌	Claim(s) are subject to restriction and/or election requirement.											
Applicati	on Papers											
• —	The specification is objected to by t											
10)	10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.											
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).											
_	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.											
<i>,</i> —	•	to by the Ex	caminer. No	te the attached Office	Action or form P	10-152.						
-	ınder 35 U.S.C. §§ 119 and 120											
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: Certified copies of the priority documents have been received. Certified copies of the priority documents have been received in Application No Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. The translation of the foreign language provisional application has been received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. 												
Attachmen	t(s)			_								
2) Notic	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (mation Disclosure Statement(s) (PTO-1449)		·	4) Interview Summary 5) Notice of Informal P 6) Other:								

DETAILED ACTION

The amendment filed 3/31/03 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: The added material on figures 10E, 10F, 10G, 10H, and the material added in the specification constitute new matters.

Applicant is required to cancel the new matter in the reply to this Office Action.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the elliptical cross-sectional shape must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The overboard bypass system/variable area exit is not disclosed in the specification.

Art Unit: 3644

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 33, 40, and 42 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

It is not understood what the overboard bypass system works. How does it duct the air out of the inlet?

It is not understood how the variable area exit works. How is it variable?

Claim 42 recites the limitation "the internal duct" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 28-35 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Koncsek et al.

Art Unit: 3644

Koncsek et al teaches an internal compression supersonic aircraft inlet that has an axisymmetric internal duct with compression angled surfaces where substantially all of the
isentropic compressions take place, throat section, shock stability bleed system having one or
more bleed passages 120, 122 so that the shockwave is maintained at the throat section (see
figures 8, 9). Koncsek et al also teaches the bleed passages have a variable area exit/overboard
bypass system 128 and the movable sidewalls/internal surfaces 50, 52, 54, 56 to provide
supersonic compression of air to the inlet throat and subsonic diffusion to the engine entrance.
As for the internal duct being rectangular, please note that in column 5, lines 44-56, Koncsek
teaches using rectangular shapes on his system. The inlets and exterior surfaces are aligned and
substantially parallel to the flow of air to the inlet. Please note that the Koncsek et al teaches that
the "a horizontal cowl for use with a rectangular engine with the direction of flight..." which
means that the external surfaces are substantially aligned with the airflow. See column 6.

Re claim 35, it would have been obvious to have made the internal duct elliptical in shape so as to allow certain aircrafts to reduce radar observability and to allow certain aircraft to operate more aerodynamically efficient.

Claims 18-27 and 36-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koncsek et al in view of Tindell.

Koncsek et al discloses all claimed parts (including centerbody, not numbered but is shown in figures 2-10, where it is between elements 31 and 33) except for the staggered leading edges. However, Tindell teaches that leading edges that are staggered are well known in the art.

It would have been obvious to one skilled in the art at the time the invention was made to have made the leading edges of Koncsek et al's staggered as taught by Tindell to accommodate certain aircrafts and to improve its aerodynamics.

Re claims 37, and 39, it would have been obvious to have made the internal duct elliptical in shape so as to allow certain aircrafts to reduce radar observability and to allow certain aircraft to operate more aerodynamically efficient.

Re claim 42, the exit of the inlet is near number 82. Therefore, the interior surface of the internal duct is continuous from the opening to the exit of inlet 82.

Response to Arguments

Please note that claims are met by references cited in the rejection since the references met all that has been claimed. Also, note that the references disclose that the external surfaces of the inlet are substantially aligned with the airflow of the aircraft.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tien Dinh whose telephone number is 703-308-2789. The examiner can normally be reached on 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Jordan can be reached on 703-306-4159. The fax phone numbers for the organization where this application or proceeding is assigned are 703-306-4195 for regular communications and 703-306-4195 for After Final communications.

Art Unit: 3644

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-4195.

TD

Ti by